Technical Report 1277

Assessing the Development of Cross-Cultural Competence in Soldiers

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The contemporary operational environment is often characterized by ambiguous, multi-cultural contexts, where Army Soldiers must rapidly adapt without extensive prior knowledge of a region or its people. Ongoing training development efforts are addressing the need for general cross-cultural competence, but this broad competence must be clearly defined and assessed in order to determine if Soldiers are being adequately prepared. To support this goal, this research effort examined how cross-cultural competence develops in Soldiers, and how that competence supports mission success. Using multiple methodologies, including cognitive task analysis, critical incident elicitation, and review of existing models, we developed a model of cross-cultural competence that includes 28 knowledge, skills, attitudes and abilities (KSAAs) over four levels of development. This model will inform the development of metrics to assess Soldiers' cross-cultural competence and provide relevant feedback.

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Cross-Cultural Competence, Cultural Awareness, Cultural Understanding, Perspective Taking, Interpersonal Skills, Cultural Expertise

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ASSESSING THE DEVELOPMENT OF CROSS-CULTURAL COMPETENCE IN SOLDIERS

EXECUTIVE SUMMARY

Research Requirement:

Contemporary operational environments are often characterized by ambiguous, multicultural contexts, where Army Soldiers must rapidly adapt without extensive prior knowledge of a region or its people. Ongoing training development efforts are addressing the need for general cross-cultural competence, but this broad competence must be clearly defined and assessed in order to determine if Soldiers are being adequately prepared. To support this goal, this research effort examined how cross-cultural competence develops in Soldiers, and how that competence supports mission success. The overall goal was to develop an Army mission-centric model of cross-cultural competence, describing critical knowledge, skills, attitudes and abilities (KSAAs) and specific stages of development.

The resultant model leverages relevant features of existing cross-cultural competence models, skill and expertise acquisition models across multiple domains, and the expertise of cultural trainers and Solders recognized as highly adaptable in cross-cultural settings. The model describes a learner's transition across stages of cross-cultural competence from novice to expert, where the end goal is the ability to rapidly and accurately assess a new culture and determine how to achieve goals using that understanding.

Procedure:

This report describes several activities, including a review of existing stage development models of skill/competence/learning both within and outside of cultural environments, cognitive interviews involving team cross-cultural rankings and critical incident elicitation to identify key cross-cultural competencies that support Army missions, data analyses to categorize the key competencies and begin to prioritize and identify interactions, and the creation of a model of Army cross-cultural development that describes developmental stages and indicators, as well as key competencies and levels within each stage.

Multiple methodologies were employed throughout the effort. Task decomposition and critical incident elicitation portions of the interviews were based on the Naturalistic Decision Making framework for investigating real-world decision making (Klein, Orasanu, Calderwood, & Zsambok, 1993; Zsambok & Klein, 1997). Specifically, Cognitive Task Analysis protocols were used in interviews with both subject matter experts and potential end user populations. Critical incidents elicited were enhanced via Critical Decision Method and Knowledge Audit protocols (Klein, Calderwood & MacGregor, 1989; Militello & Hutton, 1998). Team ranking tasks and subsequent probes were developed specifically for this effort. Multi-researcher reviews and group analyses of several data sets and existing models were performed to identify and categorize key competencies and to develop the competence model.

Findings:

Twenty-eight separate competencies that impact Army mission success were identified from the collected data. These competencies were categorized within a knowledge/skill/attitude/ability (KSAA) framework. Descriptors of Soldier characteristics and performance were developed for each of four different levels of competence: pre-competent, foundation (novice), task-oriented, and mission-centric. Specific mission-relevant examples of performance at each of the four levels were identified from the critical incident interviews.

Utilization and Dissemination of Findings:

The findings and resultant preliminary model from this effort clearly illustrate that general cross-cultural competence is a determinant of mission success in the contemporary operating environment. Knowledge of a specific culture is invaluable to the Soldier operating within that culture, but even within a single country, individual regions are distinct in cultural makeup. A Soldier who can perform competently in one part of Iraq due in part to knowledge of that region may struggle when moving to another region because that knowledge becomes irrelevant. *Cross*-cultural competence, or the ability to rapidly adapt to different cultural environments without extensive prior knowledge of the region, is a key attribute that today's Soldier needs in order to succeed.

The model of Army-centric cross-cultural competence is based on the real-world demands of today's Soldier. The final model will serve as a foundation from which to identify and develop meaningful competence metrics, and create an online tool that effectively measures an individual Soldier's cross-cultural competence and provides relevant, user-centered feedback to improve performance.

ASSESSING THE DEVELOPMENT OF CROSS-CULTURAL COMPETENCE IN SOLDIERS

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ASSESSING THE DEVELOPMENT OF CROSS-CULTURAL COMPETENCE IN SOLDIERS

Introduction

The importance of cross-cultural competence to mission success in the contemporary operating environment (COE) is clear from the abundant articles emerging in military publications in recent years (e.g., Chiarelli & Michaelis, 2005; Department of Defense, 2007; Erwin, 2004; Gompert, 2007; Hajjar, 2006; Jandora, 2005; Kipp, Grau, Prinslow, & Smith, 2006; Klein & Kuperman, 2008, McFarland, 2005; Nobel, Wortinger, & Hannahrly, 2007; Renzi, 2006; Scales, 2004; Selmeski, 2007; Skelton & Cooper, 2005; Therriault & Wulf, 2006; Wong, et al., 2003; Wunderle, 2006; Zeytoonian, 2006). The need is clear regardless of the difficulty the academic community has agreeing on a definition of cross-cultural competence. (see Abbe, Gulick, & Herman, 2007 and Selmeski, 2007 for discussions of this issue). Varying operational definitions of the concept have driven investments in training and assessment across a number of domains of practice, and the military is no exception. To focus goals and investments, the military, and more specifically the Army, requires an operational definition of cross-cultural competence that addresses the actual field requirements. Cross-cultural competence is critical to mission success across all ranks and many occupational specialties, thus creating the need to develop and assess the capabilities of a large number and wide variety of operators in order to understand the state of our military readiness.

With the current deployment requirements in terms of numbers and length (Brook, 2008), the Army cannot select only those who are most cross-culturally competent or those with the most potential for positions where high cross-cultural competence is likely to be required. In fact, it is difficult to even predict who will *not* need cross-cultural competence as missions shift into new phases and operational requirements are adapted to new circumstances during deployment rotations (Ross, 2008). Current theaters of war require cross-cultural competence. Further, the diversity of future potential Regular Army deployment locations, as evidenced by current Special Forces and Civil Affairs deployments, implies that the Army cannot prepare its forces for just one or a handful of cultural settings. The requirement to deploy forces to a large range of possible settings leaves the Army with an enormous task of understanding and developing cross-culture competence in the force; both for current operations and the foreseeable future.

One cannot anticipate and prepare for that which one cannot describe. Therefore, the most important step to support cross-cultural operational readiness is to adequately describe the performance challenges and elements of competence for Army missions. From that foundation, an assessment can be developed that allows the military community to calibrate the readiness of its force and evaluate the effects of experience and training interventions. The Army mission-centric model of cross-cultural competence that emerged from this research will be used as the basis for a system that will directly assess individual Soldiers, and will have the potential to indirectly assess the effectiveness of cultural training initiatives.

Phase 1 Activities

The intent of Phase 1 was to design a developmental model that encompasses the cognitive, affective, and behavioral skills that comprise cross-cultural competence in Army mission contexts. The Phase 1 research involved several activities, including the following:

- Reviews of existing developmental models (not all necessarily related to cross-cultural competence);
- Data collections with Army Soldiers from varying MOS to understand cultural challenges, performance, and competence development/assessment in recent deployments;
- Content analysis of examples and incidents from current interviews supplemented by other interviews done by our team on this subject to identify the variety of factors (cognitive, affective and behavioral) that make up cross-cultural competence;
- Integration of the fruits of these activities into a working model of cross-cultural competence relevant to Army missions.

Developmental Model Review

Our research team reviewed over 40 research reports, journal articles, and other periodicals that described several models of learning, skill acquisition and competence development. From that review, we identified a few key models and theories that supported our own model development. The Stage Model of Cognitive Skill Acquisition (Ross, et al., 2005), developed by researchers from our subcontracting agency, Cognitive Performance Group, and the Bennett Developmental Model of Intercultural Sensitivity (Bennett 1986, 1993; DMIS) were most useful to our efforts, but the developmental stages and transitions identified within other models helped to define our stages of development more thoroughly. Additionally, the Abbe et al. (1997) general framework for cross-cultural competence provided insight on the knowledge, skills, attitudes, and abilities that compose cross-cultural competence as well as the guiding cognitive/behavioral/affective framework used in the model. Some key features from the models that have most directly influenced our research are described below, and Appendix A provides detail on the characteristics and indicators of the individual stages of each model.

Stage Model of Cognitive Skill Acquisition

The Stage Model of Cognitive Skill Acquisition describes five developmental stages ranging from novice to expert, with the learner leveraging relevant experience and gaining greater independence and sophistication of thought with advancement. Learners at the novice stage have minimal experience in their operating domains. They rely on rigid rules and procedures to guide their actions, and they have no discretionary judgment. Learners at the second stage (advanced beginner) have some relevant domain experience. They begin to develop internal guidelines but still exhibit limited flexibility in application and limited discretionary judgment. The transition to the third stage (competent) is highlighted by a shift from highly reactive behaviors to more thoughtful behaviors, where learners can see the bigger picture and determine what actions need to be taken immediately versus those that can wait. Flexibility remains limited, however; learners continue to over-rely on static plans to drive behavior versus responding/adjusting to situational elements that may arise. Learners at the fourth stage (proficient) have extensive relevant experience to call upon. They see situations as "wholes," rather than a discrete series of parts, and they can smoothly adjust their assessments and actions as situations change. However, a small amount of reliance on guidelines as opposed to intuitive understanding remains. Learners at the highest stage (expert), while understanding rules and

procedures, do not over-rely on them; rather, they intuitively understand situations and what decisions or actions are needed. This enables them to quickly and effectively solve problems.

This model, which was based on the original framework of Dreyfus and Dreyfus (1980; 1986), has been very useful in describing mission-centric skill development in previous research. In fact, the stage model has been used to describe skill development in a wide variety of domains over the last twenty years including military operational settings. Additionally, it has served as a basis for understanding and assessing tactical thinking skills along eight dimensions and at five levels of expertise for each dimension (Phillips, Shafer, Ross, Cox, & Shadrick, 2006; Phillips, Ross, & Shadrick, 2006). As this model has been applied successfully to describe development in military operational settings, it has direct relevance to the present research.

Developmental Model of Intercultural Sensitivity (DMIS)

The DMIS model developed by Bennett (1986, 1993) is a six stage model that describes a person's reaction to cultural interactions. Specifically, Bennett proposes that a person will become more competent in interacting with individuals from other cultures as their experience of cultural differences become more sophisticated. The first three stages (denial, defense, and minimization) of the model are described as ethnocentric: At this level an individual believes that the world-view of their own culture is at the center of all reality. The final three stages (acceptance, adaptation, and integration) are described as ethnorelative: At this level an individual understands that one's own culture is no more central to reality than any other culture.

From this model, Bennett developed the Intercultural Development Inventory (IDI), a 60 item paper and pencil test that has implications for a potential baseline prescreening in our tool. Such a prescreening could assess whether a Soldier is high enough on ethnorelativism (willingness to engage, cultural openness, emotional empathy) to develop cross-cultural competence or if they instead first require preliminary evaluation and introductory training.

Conscious/Competent Developmental Model

Awareness of competence is at the heart of this model based on work by W.C. Howell. An individual first evolves from being completely unaware of their own cognitive, behavioral and affective weaknesses to becoming aware that they exist. Once the individual achieves this consciousness, active learning can begin. An individual moves to the next stage when competence develops. As skills or knowledge are acquired, it is a through a conscious, deliberate process. In the next stage of development, the individual has mastered the skill/domain well enough and for long enough to gradually become unaware of what constitutes the competence; conscious thought is not required to perform skilled tasks or make expert decisions. (Howell & Fleishman, 1982; Howell, 1986). Later versions of this model suggest a higher stage, where an expert can step out of this "unconscious competent" mode and consciously reflect on the subtle aspects of their expertise. These individuals make the best teachers because they not only have the required domain expertise, but they can also reflect upon their expertise and verbalize aspects of skilled performance to less experienced individuals (Chapman, 2007).

Alexander's Model of Domain Learning (MDL)

The MDL assesses novice to expert learning in three stages, and it emerged from studies of students' progress in various academic domains. A key feature of this model is the strong correlation identified between personal interest and advancement of learning. Typically, the higher the level of advancement, the higher the interest. It also describes learner depth of understanding and foundational knowledge. During the first stage, *acclimation*, learners have limited personal interest and domain knowledge and are in the process of getting oriented to the novel, expansive domain. At the second stage, *competence*, personal interest has increased and learners have a better foundation of domain knowledge as well as a mix of high and low-level processing strategies. At the *proficient* level, learners are experts and not only have broad understanding of the domain and its intricacies, but also *add* to the domain. Personal interest is the highest at this level. (Alexander, 2003).

Thomas' Cultural Intelligence (CQ) Model

In developing this model, Thomas studied cultural development in business settings and specifically the concept of CQ – cultural intelligence, which he defined as "the ability to interact effectively with people who are culturally different." This model divides CQ into three main components: knowledge, behavioral abilities, and mindfulness. He developed a concept of five stages of CQ development based on models from developmental psychology including Piaget's Model of Cognitive Development (Piaget, 1985) and Kohlberg's stages of moral development (Kohlberg, 1984). The CQ stage model has yet to be validated though it was derived from extensive cultural and developmental research.

At the first stage, reactivity, people basically act out of ignorance of other cultures and "mindlessly follow [their] own cultural rules and norms" (Thomas, 2006, p.91). Within the second stage, recognition, a person begins to get more direct exposure and experience with other cultures and thus, may have heightened awareness and curiosity (though they are often overwhelmed). The third stage of accommodation describes individuals developing a deeper understanding of culture in general and beginning to adjust their behavior in response to this understanding (though this is often a deliberate and challenging adjustment). At the fourth stage of assimilation, an individual is at ease in various cultures. They seamlessly adjust their behaviors in response to cultural cues and even try new behaviors. The highest stage of proactivity describes individuals who are so culturally fluid, they intuitively know how to behave in any cultural interaction. They are highly mindful of the extent and pervasiveness of cultural impact on people (Thomas, 2006). The Thomas CQ model focuses on cultural development, but also provides overt indicators of performance across competence levels and describes the thought processes that are involved at various stages of development. It further delineates cross-cultural competence development into multiple stages that integrate nicely with the Stage Model of Cognitive Development.

A General Framework for Cross-Cultural Competence

Abbe et al. (2007) developed a general framework for cross-cultural competence in Army leaders in which cross-cultural competence is described as, "as an individual capability

that contributes to intercultural effectiveness regardless of the particular intersection of cultures." This capability is composed of the knowledge, skills, and affect/motivation that an individual uses to achieve success in dynamic cultural settings. In this framework, cultural competence is a developmental construct; thus, an individual's knowledge, skills, and affect/motivation may change substantially over time (Abbe et al., 1997). The cognitive/affective/behavioral component distinction presented in this model guided the structure of our KSAA framework. It also provided a list of cross-cultural competence KSAAs (perspective taking, empathy, etc.) that further informed our model.

Method

Participants

A total of 50 interviews from three sources were included in this effort concurrent with a review of relevant expertise/competence developmental models. First, a total of 39 cognitive interviews were conducted consisting of six Civil Affairs Soldiers at Fort Bragg, NC, eight MiTT Soldiers at Fort Riley, KS, who had recently returned from deployments, 15 Soldiers with deployment experience and varied MOSs from Fort Lewis, WA, and 10 Army Ranger students with deployment experience from Fort Benning, GA. Soldiers ranged in rank from E3 to 06, and had deployment experience ranging from six months/single country to 15 years/20+ countries. Most recent deployments were mainly to Iraq, but also included Afghanistan, Ethiopia, and Ecuador. Subject age range was 27 to 45 years. The primary focus of recent deployments varied and included: humanitarian assistance, force protection, foreign military training, and engineering. Participants' previous deployment experience and travel abroad involved dozens of countries, including Panama, Somalia, Kenya, Philippines, Bahamas, Nigeria, Ghana, Honduras, Korea, El Salvador, Columbia, Pakistan, Germany, Kuwait, Saudi Arabia, Kosovo, Vietnam, Laos, Cuba, Italy, and Thailand. These interviews focused on crosscultural competence in Army operational settings, including how it develops, manifests, differs, and is currently assessed among Army Soldiers.

Notes and transcripts from interviews with an additional eight Army Soldiers that were conducted on a previous cultural research effort were also reviewed. The interviews focused on specific instances of cross-cultural encounters, and the Soldiers spoke of experiences as part of Special Forces, Civil Affairs, or Transition Teams. These Soldiers ranged in rank from E6 to 04. A final data source included three raw transcripts from interviews that team members conducted for a separate effort. These interviews were conducted with Transition Team and Civil Affairs Soldiers and had similar structure and goals to the interviews conducted for this effort.

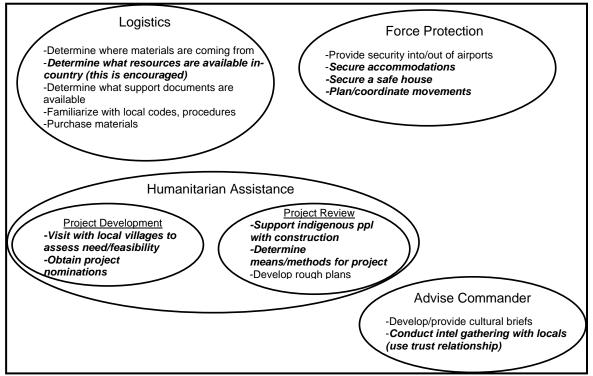
Procedure

Task Diagrams

After obtaining demographic and cultural background information, interviewers guided early interviewees through a Task Diagram development process. The purpose of the Task Diagram was to elicit the major components of the Soldier's job while deployed. Specifically, we were interested in how the Soldiers characterized their jobs as they were actually done, not by

how the doctrine or other guidance prescribes the job is to be done. The Task Diagram was used to understand what parts of the mission were most cognitively demanding, or in this case, which parts of the job required the participant to make the most assessments and decisions based on culturally-based knowledge and experience. In many of the interviews, the Task Diagrams guided the identification and elicitation of relevant critical incidents at later stages of the interview. Figure 1 shows a sample Task Diagram elicited from a Civil Affairs Soldier.

For the Task Diagram elicitation process, the interviewer placed a large piece of paper or a white board in front of the Soldier and asked something akin to the following: "Can you tell me what the 3-6 major aspects of your job were? I will draw 3-6 circles and each one will represent a major component of your job. We will label each component, and then we will generate a few bullets in each circle to describe that aspect of the job. If the major components are dependent on each other or occur in chronological order, we will indicate that with arrows." After this portion of the Task Diagram was finished, Soldiers were asked to describe which of the major components was the most challenging (and second most challenging) in terms of decisions and assessments that depended on understanding the culture or perspective of others with whom they had to interact. Further probes elicited specific details on the nature of the decision and assessments.



Note. Task components that involve significant cross-cultural interaction are bolded/italicized.

Figure 1. Civil Affairs Task Diagram

Competence Ranking Task

Perhaps the most fruitful methodology employed in the conduct of this research was an

approach developed specifically for this task. The team member ranking task provided significant insights into key Army-specific cross-cultural competencies, their perceived values, and competence development. In the ranking task, interview participants who were either team leaders or relatively senior team members on recent deployments were asked to mark (without revealing identifying information) where each team member would be located relative to each other and specific anchors along a general cross-cultural competence continuum. Interviewers then used a series of probes and hypothetical queries to specify the competence "clusters" that emerged. To illustrate this technique, Figure 2 shows the rankings and related descriptions provided by a Military Transition Team Soldier who referred to a very recently completed deployment. The competence level that the interviewee rated himself is indicated by the rectangle in Figure 2. A total of 39 team ranking tasks were elicited and evaluated in this research effort.

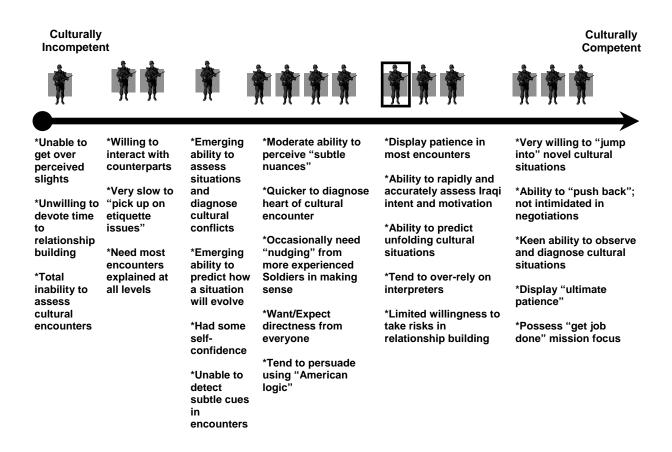


Figure 2. Example team competence ranking

Critical Incident Elicitations

Once the team ranking task was complete (this task alone often required a majority of the interview time, given the typical extent of the probing that occurred), and if time permitted, interviewers utilized Critical Decision Making (CDM) techniques to elicit critical incidents where cross-cultural competence, or lack thereof, was a key contributor to mission success or

failure.

The critical incident elicitations were guided by the Naturalistic Decision Making (NDM) theoretical framework which studies how people use experience to make decisions in operational settings (Klein, Orasanu, Calderwood, & Zsambok, 1993). NDM investigates strategies people use in performing complex, ill-defined activities under time pressure and uncertainty, and under team and organizational constraints (Klein, Orasanu, Calderwood, & Zsambok, 1993; Zsambok & Klein, 1997). Many cross-cultural encounters are dynamic, uncertain, and fast-paced. Thus, there is no one right way to make a decision. In such real-world settings, NDM researchers typically study experts to define sound decision making and describe effective decision-making processes. Researchers using the NDM framework have examined expert performance in hundreds of diverse domains, including such professionals as weapons directors (Klinger, Andriole, Militello, Adelman, Klein, & Gomes, 1993), firefighters (Klein, Calderwood, & Clinton-Cirocco, 1986), critical care nurses (Crandall & Getchell-Reiter, 1993) and command and control officers (Kaempf, Klein, Thordsen, & Wolf, 1996).

The semi-structured interview procedure used in this effort involved the following CDM protocol:

1. Incident identification: Here, interviewers looked for incidents in which the participants played a key role in assessing cross-cultural competence (leaders), or in managing or planning for a complex cross-cultural interaction (team members or leaders). Example probes were: "Tell me about the most recent time you had to assess the ability of one of your team members to interact with your foreign military counterparts or other foreign citizens?" or "Can you think of a time when your experience and expertise was really important in helping you make an accurate assessment of one of your team members?"

For team members: "Can you think about a time when you were in the midst of X (Where X is one of the job tasks identified by the participants earlier in the interview that has a strong cross-cultural component -- e.g., extended interaction with your foreign counterparts) and your skill really made a difference—maybe things would have gone much worse if you hadn't been there?"

- 2. Story telling: After giving participants up to two minutes to think of an incident, interviewers asked for a run through of the incident, without interruption. Here, interviewers were listening for places to probe, story gaps or timeline, errors made, situation assessment shifts, violated expectancies and other cues for deepening at the next level. A few examples of indicators that such cues were present are: "Something just didn't feel right.", "It all seemed familiar.", and "It depends on the situation.".
- 3. Verifying the details: After the uninterrupted retelling of the story, the interviewers asked participants a wide range of clarification questions. The objective here was to obtain a clear understanding of the incident as it occurred, clarify any inconsistencies, identify the key decision points, and tie a timeline into the story.

- 4. Deepening on the incident: The next series of questions probed more deeply into the participants' decision process. Specific probes focused on cues and information sources employed, objectives, situation assessments made, and strategies employed *within the incident*.
- 5. Hypothetical probing: The last part of the CDM interview probed for expert-novice differences and common errors that could be made. This was done with a series of what-if type probes. Examples of probes used include: Were other courses of action considered? Why/Why not? Would someone else with less experience have acted differently? How? Would you have made the same decision when you first started the assignment? How about 5 years ago in your career? How would this situation turned out if you had not been there? What are the most likely errors that someone with less experience would make in that situation? Researchers also probed incidents using the recently created team competence ratings by asking specifically how individuals at different points on the scale would have seen the situation differently or reacted in different ways.

To further illustrate the technique, a sample elicited incident is presented below.

Background: A US Army Colonel was part of a new MiTT team in Iraq. He was assigned to support an Iraqi Army Colonel who had recently been tasked with standing up a fully operational battalion. Even though they were months from going operational, the US Colonel knew what had to be done now, and in the upcoming weeks to ensure a smooth standup process, he discussed the immediate and longer-term steps with the Iraqi Colonel. There was a significant amount of preparation and planning required.

Situation: The Iraqi Colonel seemed to agree in principle with all the US Colonel's ideas. However, in the next couple of days, the Iraqi Colonel did nothing. When approached again, he agreed that there would be problems if they didn't prepare for the arrival of the hundreds of new Soldiers, but he was not willing to do any work and said they would just deal with the problems as they occurred.

Over the next two weeks, the US Colonel sat down with the Iraqi Colonel about 10 times to discuss the situation. Each time, he tried something different to motivate the Iraqi. He emphasized the benefits of preparing, illustrated in detail the potential problems that could result from not preparing, told him of "the American Way," told stories of past planning successes, pointed out how the Iraqi's existing housing structures could be ideal for situating and organizing the incoming units, had the Iraqi brief back plans, verbally praised the Iraqi, and tried several other techniques, hoping the Iraqi Colonel would think about the issue more and get motivated to act. Still this did not happen.

At that point, the US Colonel modified his original goal. He saw that having the unit stood up in time was more important than training the Iraqi counterpart to do it himself. He also saw that the Iraqi Colonel agreed with him, but that he just didn't think that the benefits outweighed the work required. The US Colonel spent much time and energy making a very detailed battalion organizational structure, accounting for all 610 incoming Iraqi Soldiers. He transferred this structure to a massive paper-based visual representation, knowing the Iraqi would find it impressive, and he brought it to the Iraqi. All the Iraqi Colonel had to do was fill in the names.

The Iraqi Colonel was immediately engaged. He loved this impressive visual layout of the battalion, and he subsequently took all credit for it, showing it off to fellow battalion commanders. The battalion was stood up very efficiently when the Iraqi Army Soldiers arrived. The US Colonel recognized what would please the Colonel, didn't mind not getting credit for the work and recognized the importance of doing whatever it took to set up the unit. In the end, the structure that the US Colonel developed was adapted throughout the Iraqi Army. ¹

Additional critical incidents and the competencies they suggest are presented elsewhere in this report and in Appendix B.

Content Analysis of Competence Factors

From the three sets of data (prior cross-cultural competence interview data from a recently completed Phase 1 SBIR, current interview data, and supplemental data from Ross (2008), several competencies were identified that appeared to impact Army missions. The knowledge, skill, attitude and ability (KSAA) breakdown as described by USJFCOM at a 2004 symposium (Newlon, 2004) was utilized since it is familiar in military and other settings, where competencies are clusters of KSAAs. USJFCOM defined KSAAs in the following manner:

- *Knowledge* describes a body of information, usually of a factual or procedural nature, applied directly to the performance of a function/task.
- *Skill* describes a present, observable competence to perform a learned act (could be motor, psycho-motor, and/or cognitive).
- Attitude describes an internal state that influences an individual's choices or decisions to act in a certain way under particular circumstances.
- *Ability* describes a general more enduring capability an individual possesses at the time when he/she begins to perform a task.

Using this framework, instances were documented in the data where cross-cultural competence was involved (or conspicuously missing) in mission-related incidents, or specifically described by interviewees as distinguishing the cross-cultural competence levels of team members in the team ranking task. Researchers independently performed an initial sort of the instances into like groupings. Following that sort, a list of factors from the literature was consulted to refine the factors considered and a second sort was performed by two researchers working to obtain agreement about which KSAA each item represented.

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¹ Upon initial review of this incident, one might be tempted to attribute the Iraqi Colonel's behavior purely to cultural differences. The US Colonel in this case could have made broad and inaccurate generalizations about Iraqis and Iraqi military in general, but he did not. Although some cultural attributes may have influenced the Iraqi Colonel's behavior and attitudes, the US Colonel recognized the individual attributes of this particular Iraqi Colonel that were driving much of his behavior. The US Colonel saw his counterpart as an individual, resisting the temptation to attribute the apparent laziness and self-serving actions to the overall culture. Such ability suggests a possible competence of attribution complexity. Although attribution complexity was not specifically addressed in our initial research, follow-on efforts should investigate the presence and impact of this variable on general cross-cultural competence.

Results and Discussion

Relevant Features of Existing Models

In our review of existing models of learning and competence development, the Stage Model of Cognitive Skill Acquisition (Ross et al., 2005), and the Bennett Developmental Model of Intercultural Sensitivity (Bennett 1986, 1993; DMIS) were found to be most relevant to our model development. But the developmental stages and transitions identified within other models also helped to define stages of development more thoroughly.

Throughout our data collections, we recorded instances of Soldiers performing crosscultural tasks at all levels of development. These instances were consistent with the levels of development described in the Stage Model of Cognitive Skill Acquisition. For example, a crossculturally skilled MiTT leader described a novice team member who would frequently lose his temper when cross-cultural encounters did not play out according to his expectations. On one occasion, this Soldier noticed that his Iraqi counterpart's team ran out of water at a construction site. He had mentioned once prior that the Iraqi should bring enough water. He immediately started screaming at the Iraqi leader in front of his entire unit, causing great embarrassment, and likely damaging a very critical relationship. The novice was unable to calmly or accurately assess the situation and did not envision the broader (or even immediate) effect of his actions. He inappropriately reacted out of anger and made the situation much worse. However, the MiTT leader in charge of the US Soldier quickly remedied the situation by speaking respectfully to the Iraqi commander in front of his unit, apologizing on behalf of the Soldier who screamed at him and praising the Iraqi in general. The MiTT leader, being more culturally aware, immediately knew how time-sensitive the situation was and was able to seize the opportunity to repair the damage that had been done by the novice.

Additionally, we observed that a strong ethnocentric attitude was the common denominator of low-ranked Soldiers on team member cross-cultural competence ranking tasks within our interviews. These Soldiers were described as exhibiting blatant disrespect for the foreign culture, unwillingness to engage, and belief of blanket stereotypes applied to all the citizens of a host nation (e.g., "They are all lazy;" "You know them. They are all 'gimme,' 'gimme,' 'gimme;" "The thing about them is that they only want money."). Soldiers described at this level were unwilling to eat meals with foreign counterparts they were assigned to train, were resistant to all socialization opportunities, and tended to view locals as inferior. They expressed no interest in understanding or acknowledging differing points of view, and showed disregard for very basic cultural norms (e.g., Soldiers would blatantly scold the foreigners they were training in front of their peers with full knowledge that it is an extreme form of disrespect and severely embarrassing). It became apparent in our interviews that, across mission and rank, a strong ethnocentric attitude inhibited some Soldiers from even getting to a stage where cross-cultural competence could begin to develop. Thus, the idea from Bennett's Developmental Model of Intercultural Sensitivity that a Soldier must have at least a baseline of ethnorelativsim before then can develop cross-cultural competence was incorporated into our model.

We also incorporated features from Chapman's (2007) Conscious/Competent Developmental Model. From this model we integrated descriptions of how awareness manifests

in performance at different levels of competence. For example, at lower levels of competence, Soldiers tended to deny the relevance of many relationship or rapport building skills partly because they are unaware of their importance. One Infantry Soldier vehemently stated, "All I needed to be able to say for my job (while providing security for the Company commander during village visits) was to 'get away from the vehicle'." Unawareness inhibits development of the competence. At higher levels, cross-cultural interactions become almost "second nature" or automatic, and it may even become difficult for Soldiers to explain how they perform certain mission-centric actions.

Alexander's Model of Domain Learning (MDL) provided insight into several relevant distinctions between, and overt indicators of, acclimation, competence, and proficiency that we saw in our data. Specifically, Alexander's model describes how *and why* individual interest may develop as competence evolves, and how it can support or inhibit development. Alexander posits that "individuals care more about domains for which they know more and know more about domains for which they are individually interested." (Alexander, 2003). A person may have situational interest when first learning about a domain (e.g. interest driven by an upcoming test), but as competence develops in the domain, interest increases and becomes more personal. The emerging personal interest then leads to increased knowledge; thus, the elements of interest and knowledge reinforce development in the domain. An expert has the highest level of interest and motivation as well as knowledge.

We documented many instances of Soldiers referring to an emerging interest in interacting with locals beyond minimum requirements. For Soldiers with even higher levels of competence, interest levels were higher yet and seemed to be internalized. Calculated risks were taken to foster relationships, not only because they supported the mission, but because Soldiers were inherently interested in "learning the customs," "really understanding their way of life better," or "get(ting) a chance to see things from their eyes". The MDL also emphasizes how information processing strategies evolve along with competence.

Finally Thomas' Cultural Intelligence (CQ) Model provided insight into understanding patterns in our data set. Within the second stage of this model, *recognition*, a person begins to get more direct exposure and experience with other cultures and thus, may have heightened awareness and curiosity (though they are often overwhelmed). We saw this repeatedly in our data, where Soldiers described an emerging ability to "see things the way they (host nation individuals) saw them," but at the same time becoming overloaded with the information processing demands of this emerging ability, and having to fall back on more experienced Soldiers to help them interpret more complex situations and motivations. Thus, this model's stages of cross-cultural competence development integrate nicely with the Stage Model of Cognitive Development and our data.

Mission-Centric KSAAs

The competence analysis yielded twenty-eight different KSAAs that impacted mission-centric cross-cultural competence. Table 1 provides a frequency count of the number of times each KSAA was mentioned across all interviewees. This is not a complete list of all potential factors that comprise the KSAAs of cross-cultural competence, but rather an initial grouping

based on analyses of the initial data sets.

Table 1. Instances of cross-cultural competencies in mission settings

Components with related KSAAs	Frequency
Cognitive	
Perspective-taking	122
Anticipate/Predict	62
Awareness of cultural differences	49
Diagnose nature of resistance	49
"Big picture" mentality	47
Self-awareness/Self-monitoring	39
Interpretation	36
Observation	33
Frame Shifting	23
e	25 25
Planning	23
Affective/Attitude	
Cultural openness	98
Open-mindedness	83
Willingness to engage	76
Emotional empathy	64
Dedication (going "above & beyond")	58
Self/Emotional regulation	41
Withhold on closure	40
Patience	39
Tolerance for ambiguity	20
Emotional endurance	17
Self-efficacy	16
Resilience	14
Behavioral	
Self-presentation	101
Relationship-building	89
Rapport-building	73
Manipulate/Persuade	70
Flexibility	42
Communication Skills	31
Leveraging own personality attributes	13

We have developed working definitions for each of these competencies. Some are based on previous research, whereas others emerged from our data analysis. The cognitive competencies are defined as follows:

• Perspective-taking – "The ability to see events as another person sees them." (Abbe et al., 2007, p. 20)

- Anticipate/Predict Ability to foresee potential, likely outcomes based on current assessment of a cross-cultural situation
- Diagnose nature of resistance Ability to integrate an understanding of the cultural environment with perspective taking to determine root causes of an interpersonal conflict
- Self-awareness/Self-monitoring Ability to see self as others see you and to recognize subtle changes in your own personal affect and adjust outward behaviors accordingly
- "Big Picture" mentality Ability to maintain awareness of the high-level drivers within an operational environment
- Interpretation Ability to derive meaning out of perceptual cues and factors within a situation
- Observation Ability to determine relevant environmental cues and attend to them in an operational environment
- Frame shifting Ability "to detect situational cues that indicate a particular cultural schema or behavioral script is relevant." (Abbe et al., p. 21)
- Awareness of cultural differences Knowledge and "awareness that culture shapes beliefs, values, and behavior and that one's own beliefs, values, and behavior reflect a cultural context." (Abbe et al., p.14)
- Planning Ability to proactively generate workable courses of action based on observations and interpretations of the cultural environment

The affective/attitude competencies are defined as follows:

- Willingness to engage —The tendency to actively seek out and explore unfamiliar cross-cultural interactions and to regard them positively as a challenge
- Cultural openness One's interest and drive to learn about new cultures and to gain new cross-cultural experiences (Ang et al., 2004)
- Withhold on closure Ability to restrain from settling on "immediate answers and solutions", and to remain open to "any new information that conflicts with those answers" (Kruglanski & Webster, 1996, as cited in Abbe et al., 2007, p. 17)
- Self/Emotional regulation The ability to regulate/control one's own emotions and emotional expression to support mission performance

- Dedication ("Above & Beyond") The attitude of disregarding or deemphasizing personal interests, comfort and gain in service of supporting broader mission goals; High motivation to do more than minimum required
- Open-mindedness The ability to withhold personal or moral judgment when faced with novel experiences, knowledge and points of view
- Patience The ability to cope with cultural frustrations without expressing hostility
- Emotional empathy "The ability to feel as another person feels" (Abbe et al., 2007, p.16)
- Emotional endurance The ability to mentally tolerate emotionally shocking, frustrating or exhausting (due to repetition) circumstances
- Tolerance for ambiguity "(T)olerance for ambiguity is a general disposition that broadly influences cognition, attitudes, and behavior. Low tolerance for ambiguity is characterized by rigidity, dichotomous thinking, authoritarianism, and ethnocentrism." (Frenkel-Brunswik, 1949, as cited in Abbe et al., 2007, p. 8).
- Resilience The ability to retain task focus and enthusiasm when faced with repeated setbacks, failures and/or obstacles to success
- Self-efficacy "Belief in one's capabilities to mobilize the motivation, cognitive resources, and courses of action needed to meet situational demands" (Wood & Bandura, 1989, p. 408).

Lastly, the behavioral competencies are described as follows:

- Self-presentation The ability to consciously modify overt behaviors and appearance in response to changing demands of the cross-cultural interaction
- Relationship-building The long-term ability to create and manage enduring interpersonal cross-cultural relationships
- Rapport-building The ability to rapidly build a positive, short-term interpersonal cross-cultural relationship
- Manipulate/Persuade The ability to proactively direct the structure and/or outcome of cross-cultural interactions to achieve individual or higher-level goals
- Flexibility "Ability to adjust one's behavior or cognitive frames of reference in response to situational cues in particular, in response to cultural cues" (Abbe et al., 2007, p. 20)

- Communication Skills Ability to both convey and receive information accurately and efficiently in cross-cultural interactions
- Leveraging own personality attributes Ability to recognize one's own individual personality-based strengths (e.g. sense of humor) and use them to consciously support cross-cultural interactions.

Examples of Competencies in Mission Settings

The most frequently occurring *cognitive* KSAA appearing in the data was perspective-taking. Perspective-taking emerged as a pervasive component of overall cross-cultural competence. A simple example involved a Soldier seeking to understand the Iraqis who worked under him and consciously trying to determine what their physical and emotional needs were based on their individual histories and circumstances. He realized that efforts he would make to respect their cultural and religious traditions and norms, such as providing work breaks for prayer, would be viewed very positively. As he went out his way to do just that, the Iraqi workers, in response, displayed extraordinary cooperation, worked harder than other workers, and successfully completed their work projects in a timely manner.

Awareness of cultural differences is another competency that has been prominent in the data. One Soldier understood how influential culture is on people and groups, and he sought opportunities to understand how this was true specifically for Iraqis. For example, he used free time to study differences between tribal roots; one tribe might have an Egyptian background, and another Syrian. These seemingly subtle (to an outsider) differences in background contribute to influence the tribe's perspective, culture, and thus, their behavior.

Another frequent competency in the cognitive category was big picture mentality in order to see the long-term consequences of one's behavior. Continuously considering the broader mission often helps Soldiers stay focused, avoid frustrations, and to operate more successfully across challenges. A particularly competent Captain, for example, never would take credit for his own success or ideas if an opportunity presented itself to give the his foreign counterpart the credit instead: "The trick was not to let them believe the Americans made the decision, because if you let them believe the Americans made the decision, then they would come to you for everything. What you have to do is empower the leaders."

The most frequently occurring *affective* KSAAs were cultural openness and open-mindedness. The attitude of cultural openness showed up repeatedly in the data. One Soldier leveraged his interpreter frequently on an informal basis to learn seemingly minor details about local Afghanis. He continuously asked questions to understand why villagers were performing certain actions or responding in different ways. He was interested and curious and wanted to understand the people, even when this understanding did not directly relate to any particular mission objective.

In an example of open-mindedness, one Soldier reported being able to build relationships and work successfully on long-term efforts with an ally Afghan tribal group despite some fundamental differences in acceptable behaviors. He was able to attribute some extremely

questionable behaviors and attitudes to cultural differences; although he disagreed with the actions and attitudes, he was able to understand why individuals might develop or display them. This type of open-mindedness pertaining specifically to cultural issues is significant, and may eventually be treated as a separate competency. Whereas we are currently viewing "cultural openness" as an interest in other cultures, this cultural open-mindedness is more related to understanding and managing cultural differences. We recognize overlap between several competencies, and in our next phase of research and analysis we will arrive at a final, integrated list.

Displays of emotional empathy were frequent as well. For example, while many Soldiers viewed foreign nationals as lazy, untrustworthy, and greedy, others refused to take that view. They noted repeatedly how the locals were living under very stressful conditions such as death threats from insurgents for helping Americans and that they often were only motivated to protect themselves and their families. These Soldiers were able to feel the emotions of the locals by considering how they would feel and act under similar circumstances. This emotional empathy may be a necessary precursor to developing or having cognitive empathy.

The most frequently occurring *behavioral* KSAAs were self-presentation, relationship-and rapport-building, and manipulation/persuasion. Many Soldiers spoke of the importance of how you physically present yourself to foreign nationals. Consider a Company Commander in a Medical Unit who persuaded an Iraqi medical director not to send patients to dangerous hospitals even though that was the preferred and easiest course of action for the director. To accomplish this, the Soldier consciously presented himself in a particular way: "I had to create the image that I cared what he had to say, I cared what he wanted, and it was kind of like playing poker." Thus, the Soldier was aware of how he came across (self-monitoring) and was also able to actively change his behavior to support his needs within the situation (self-presentation).

Relationship- and rapport-building was also prevalent in the data. A typical example can be found in a transition team Soldier's explanation of how he built a relationship with his Iraqi counterpart: "Just going in and let him speak. Some days, in the beginning, I would just sit there ... just listen, just allow him to speak and get everything off his chest, just open himself up, and gain some trust with him. I would bring him something every once in a while I'd get maybe an American CD, give him an American CD to give to his family, ask him about his family, that's a real big thing."

Manipulating/persuading was also an often-cited competency for mission success. For example, one Soldier recognized the value of saving face within Iraqi culture and purposefully leveraged this knowledge to persuade a counterpart to adopt a particular course of action. The Soldier's unit had spent a great deal of time caring for and providing a safe haven for some sick civilians, but the director wanted to use the facility for other purposes. The Soldier responded by claiming that he and his men would be shamed if the facility was repurposed after they had put so much of their time into treating the infirmed and creating the safe environment. This amounted to nothing less than a direct insult to the dignity of his unit, the Soldier told the director. As a result, the director changed his mind and let the patients stay.

To further demonstrate how such competencies manifest within operational settings, the incident described earlier in the Method section is presented again, but this time with suggested competencies noted throughout in bold.

Background: A US Army Colonel was part of a new MiTT team in Iraq. He was assigned to support an Iraqi Army Colonel who had recently been tasked with standing up a fully operational battalion. Even though they were months from going operational, the US Colonel knew what had to be done now, and in the upcoming weeks to ensure a smooth standup process, he discussed the immediate and longer-term steps with the Iraqi Colonel. There was a significant amount of preparation and planning required.

Situation: The Iraqi Colonel seemed to agree in principle with all the US Colonel's ideas. However, in the next couple of days, the Iraqi Colonel did nothing. When approached again, he agreed that there would be problems if they didn't prepare for the arrival of the hundreds of new Soldiers, but he was not willing to do any work and said they would just deal with the problems as they occurred.

Over the next two weeks, the US Colonel sat down with the Iraqi Colonel about 10 times (Determination; Patience) to discuss the situation. Each time, he tried something different to motivate the Iraqi (Flexibility; Resilience). He emphasized the benefits of preparing, illustrated in detail the potential problems that could result from not preparing, told him of "the American Way," told stories of past planning successes, pointed out how the Iraqi's existing housing structures could be ideal for situating and organizing the incoming units, had the Iraqi brief back plans, verbally praised the Iraqi, and tried several other techniques, hoping the Iraqi Colonel would think about the issue more and get motivated to act. Still this did not happen.

At that point, the US Colonel modified his original goal. He saw that having the unit stood up in time was more important than training the Iraqi counterpart to do it himself (Big Picture Mentality; Mission Focus). He also saw that the Iraqi Colonel agreed with him, but that he just didn't think that the benefits outweighed the work required. The US Colonel spent much time and energy (Dedication) making a very detailed battalion organizational structure, accounting for all 610 incoming Iraqi Soldiers. He transferred this structure to a massive paper-based visual representation, knowing the Iraqi would find it impressive, and he brought it to the Iraqi. All the Iraqi Colonel had to do was fill in the names. The Iraqi Colonel was immediately engaged. He loved this impressive visual layout of the battalion, and he subsequently took all credit for it, showing it off to fellow battalion commanders. The battalion was stood up very efficiently when the Iraqi Army Soldiers arrived. The US Colonel recognized what would please the Colonel (Perspective-taking), didn't mind not getting credit for the work (Dedication) and recognized the importance of doing whatever it took to set up the unit (Big Picture Mentality; Mission Focus). In the end, the structure that the US Colonel developed was adapted throughout the Iraqi Army.

Although redundancies and undefined interactions among the identified competencies remain, they nonetheless provide a basis (integrated with the model review) from which to derive a model of cross-cultural competence development in Army settings.

Cross-Cultural Competence Model Development

The mission-relevant cognitive, affective, and behavioral KSAAs were integrated into an initial developmental framework of cross-cultural competence. Although the gathered data are specific to cross-cultural competence in Army mission settings, the basic elements of cross-cultural competence presented will likely support performance in a variety of cultural settings. The working model presented below represents a step toward an innovative model based on an integration of data and theory. It represents the complex nature and development of Army mission-centric cross-cultural competence as a process of development that can be represented as a continuous scale. Further model and related assessment system development efforts will consciously examine the conceptualization of the parallel nature of general development and development of specific domain application skills.

Model Structure

The four levels of competence represented in the model are

- Pre-Competent
- Foundation
- Task-Oriented
- Mission-Centric

Each level of competence can be thoroughly described in terms of the cognitive, affective/attitude, and behavioral components, the knowledge, skill, abilities, and attitudes (KSAAs) in each component, and stages of development for KSAAs in each component. Figure 3 illustrates the components of the model and how they reflect development at each level of competence. Note that only a few sample competencies are listed for each developmental category to illustrate the model structure. See Table 1 for a complete list of competencies that will be considered as the initial model structure is fully developed in our next phase of work.

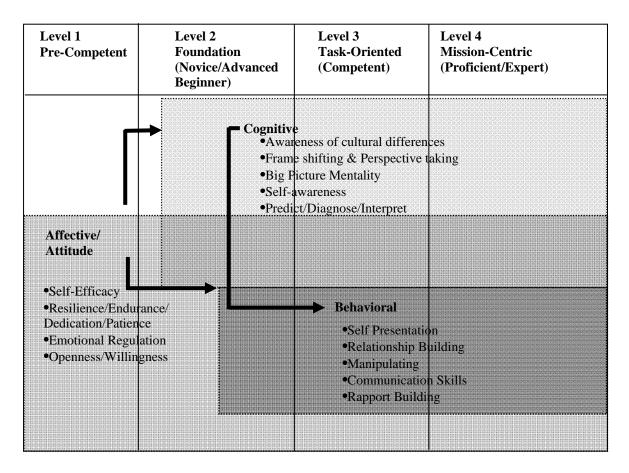


Figure 3. Stage model of cross-cultural competence with sample representative KSAAs

Model Components

There are three components to the model:

- Cognitive (Knowledge, Skills and Abilities)
- Affective/Attitude (Abilities, Attitudes and Motivation)
- Behavioral (Observable Skills and Abilities)

To best understand and measure differences in competence levels, the variety of KSAAs that make up cross-cultural competence were assigned to one of these three components. Each of the components is then further decomposed to provide indicators of how each KSAA is expressed at different levels of development. The model suggests that each of these components can, to an extent, develop in parallel. Some foundational affective/attitudinal development is necessary upfront before a Soldier can even begin to develop competence, and behavioral development likely requires a minimal foundation of cognitive competence as reflected in the structure of the model in Figure 3. But once these initial elements are in place, competence can develop concurrently along all three components.

The cognitive component is made up of knowledge and cognitive skills and abilities. Perspective taking, for example, is an ability that is based on a knowledge foundation of how cultures can differ, such as a framework for comparing cultures. Observation is largely a

cognitive skill. Frame shifting is a cognitive skill which "requires an individual to detect situational cues that indicate a particular cultural schema or behavioral script is relevant" (Abbe et al., 2007, p. 21). The Developmental Model of Intercultural Sensitivity (DMIS) includes both aspects of cognition and affective/attitudinal development and influences. For example, the knowledge foundation that allows a person to understand similarities and differences among people from different cultures as they progress in development is cognitive. The more nuanced and accurate mental model of other cultures is considered in our model in terms of both the general stage model of cognitive development and the domain specific development of intercultural sensitivity.

The affective/attitude component includes abilities, attitudes and motivation. Self-regulation, empathy and willingness to engage are examples of factors that fall within this component. The influence of the DMIS is particularly important to this component and to our model as it allows us to understand how the affective/attitude component reflects the "gateway" to further development. For example, a person at the Ethnocentric stage has not yet developed the necessary affective/attitude components necessary to develop behavioral or cognitive components.

The behavioral component is made of observable skills such as relationship building. Even though interpersonal skills may be based on cognitive and affective factors, they are observable in execution. Separating out observable skills supports the design of performance metrics. To the extent possible, we will link the observable skills to the affective or cognitive factors that support them.

Knowledge, Skills, Attitudes and Abilities (KSAAs)

Each component has a number of KSAAs. For example "willingness to engage" is one factor of the affect/attitude component. All of the KSAAs are factors that will be relatable to potential findings in terms of factor analysis conducted in future research or in existing literature on metrics and models of cross-cultural competence. Each component can be described in terms of developmental stages of the KSAAs from pre-competent to mission-focused competence in line with the Competence Level descriptions below.

Description of Competence Levels

Each level is described in terms of both performance and "theoretical underpinnings." The description is followed by one or more examples of performance at this level.

Pre-Competent Level

The first level is the Pre-Competent Level. This level reflects deficits in the affective component of military cross-cultural competence. This initial level differs from the label "novice," as used in the Stage Model of Cognitive Development, in that the person is not ready to benefit from learning the knowledge and basic guidelines on which novices depend due to attitudes that impede learning. A person at this level may actively resist training and ignore basic guidelines and knowledge provided. For many, this level is never experienced, and the true starting point is further along, at the Foundation level. Only if individuals are past the Precompetent level can they begin to learn the important knowledge and skills necessary to achieve

competence. Thus, this level functions as a "gateway" to competence. Based upon our qualitative data analyses and various research literature, both inside and outside of the military, this level may reflect ethnocentrism, as demonstrated by a low willingness to engage with those of other cultures, negative experiences when encounters do occur, a lack of open-mindedness, and a lack of emotional empathy for those who are different from oneself (stereotyping and objectifying). By developing "prescreening metrics" designed to diagnose this level of competence, we will be able to identify respondents who require a preliminary type of introductory training that is targeted at changing the affective and attitudinal impediments and giving the person a reason to recognize the importance of developing their ability in this area.

The Developmental Model of Intercultural Sensitivity (DMIS) is the primary theoretical underpinning for the Pre-Competent Level. The DMIS has six stages. The first three are ethnocentric stages (Denial, Defense, and Minimization). We believe the first two stages are indicative of foundation elements that may be missing at this level of our model. Additionally, our interview data indicate that the lack of willingness to engage and lack of openness to new experiences were often used by interviewees to explain the lowest rankings they gave in our team rating exercise that were indicative of this level of "non-performance." Also, emotional empathy seems to be a precursor for allowing openness to new cultures and thus, predicts the ability to move toward cognitive empathy, or perspective-taking found in the next level of our model. Emotional empathy is potentially measurable (see Wang et al., 2003) as a way to discriminate those at this level or those just at the entry point of our next level (those who have some empathy, but lack knowledge). The Conscious/Competent Model is also relevant in that the person at this stage is unaware that they are not competent, and may believe this area of performance is not important to develop and is not even an area of domain expertise (see Model of Domain Learning in Appendix A).

The interview data provided both direct (the interviewee speaking of themselves) and indirect (the interviewee speaking of a lower-ranked team member) examples of this level of development. Over the course of a year-long assignment, one MiTT team member dined with his counterparts on only one occasion, and that was when forced by his superiors. Similarly, an Infantry Soldier, who had many opportunities to interact with his interpreter and with the locals during patrols chose to never engage in a social conversation or attempt to learn about the local culture throughout a nine-month assignment. He was unable to relate any information about his interpreter other than his name. Soldiers at this low level of development typically engaged in dismissive and distancing language, using derogatory labels and stereotyping to maintain an attitude of "lumping" all local nationals into one group. Some also engaged in openly hostile comments as well at the beginning of the deployment. ("I'm not even going to talk to them. They better not even look at me." "I let my (weapon) do all the talking for me.") Note that hostility is not necessary for assignment to this level; only a dismissive or "we-they" (in-group versus outgroup) bias.

The interview data also revealed examples of how leaders attempted to work with subordinates at this lowest level of military cross-cultural competence and prepare them to enter into the next level. At times, leaders made use of the emotional empathy approach when coaching subordinates in an attempt to enlarge their perspective. The goal of the coaching sessions seemed to correlate with the third stage of the DMIS in which people believe all humans

are basically the same. One leader explained how the Iraqis allowed onto the Forward Operating Base took considerable risks to be there in order to support their families by running the small concessions of supplies that the Army purchased. It seemed a step up from the Pre-Competent Level for the Soldiers receiving this coaching to acknowledge that the local nationals all had families they cared about and were trying to support by their actions, and are motivated by the same things we are; in other words, they are "just like us." To create more respect among his subordinates in their interactions with local nationals, the "coach" also provided an explanation of why the Soldiers should not refer to the on-post makeshift market of concessions run by local nationals as the "Hadji Mart." Hadji is a common slang term for local nationals, which is used in Iraq by our Soldiers. Some label the term racist. In this example, the coach encouraged his Soldiers to take a different and more respectful perspective of the people they see each day. The Platoon Sergeant, in his attempt to coach his subordinates, explained that the term Hadji is actually an Arabic term of respect for someone who has made the pilgrimage to Mecca and, as such, its use to identify any and all Iraqi citizens is offensive to the local nationals and shows a lack of understanding by the Soldiers. Using the term without understanding its intent creates distance through disrespect.

Foundation Level

Second is the Foundation Level. This level encompasses the novice and advanced beginner, as defined in the Stage Model of Cognitive Development, as movement through this level progresses. Novices have abstract knowledge to support competence, but little to no experience. They lack the ability to understand how that knowledge is used in a complex situation. When pressed to perform, they are guided by rules leaving them inflexible in dynamic situations. They tend not to notice the interplay of elements in a situation and are easily overwhelmed. Advanced beginners have more knowledge and some experience. They look to external sources for answers, and so are able to accept and use feedback on performance. They may have a lack of commitment and involvement, and can benefit from coaching to help them identify priorities and derive meaning in complex situations.

Performance within the level is not static. Entrance into the level is indicated by a willingness to learn and engage with people from another culture, though experience is non-existent or limited. Experience gained during this level creates more understanding and acceptance and knowledge of one or more specific cultures increases. Basic elements of competence and knowledge emerge. The learner recognizes he/she has deficits. This level is based on initial development in the following areas:

- entry into DMIS Stage 3 and movement into Stage 4 is a goal of this level
- entry into initial levels of the cognitive component in terms of perspective taking
- experience (real or simulated) that allows some behavioral skill development in terms of interpersonal skills

As stated above, cognitive empathy is limited or non-existent when there is a lack of emotional empathy and the presence of the DMIS Stage One or Two ethnocentric stances. The person at this level has recognized the limits of ethnocentric attitudes and this lays the foundation for the development of perspective taking, self-awareness, and the ability to choose one's own

behavioral responses in cultural interactions; though performance is still largely inflexible and very conscious during application (see the Cultural Intelligence Model). A person at this level recognizes his own incompetence (Conscious/Competent Model) and the importance of this domain of expertise (Model of Domain Learning).

Functioning at this level requires entry into the behavioral component of the model, e.g., interpersonal skills needed for relationship building and rapport building skills, which are vital for many, but not all positions, to carry out military missions. In the case of those who may not have as strong a need for the interpersonal skills, we are thinking of the Intelligence Analyst, Information Operations Officer, or civilian analyst, for example. These individuals may enter this level and continue to progress in perspective taking competence, but not necessarily develop the interpersonal skills component due to the nature of their job. However, they will benefit from understanding how the rapport and relationship building skills are operationalized in the field. We differentiate between relationship and rapport building based on our interview data. In jobs that demand the creation and sustainment of mutual activities such as MiTT missions, relationship building is critical. In other jobs, such as infantry patrols or convoy operations, the opportunity and need to build relationships may be minimal (depending on how the command structures the mission and duties). However, encounters to collect information, conduct needs assessments, search homes, or deal with critical situations like convoy breakdowns, require the ability to build rapport with strangers to solve short-term problems.

Perspective taking and relationship/rapport building are complicated cognitive and behavioral abilities that can develop once certain affective/attitudinal skills and abilities are present. Both are influenced by several KSAAs. For example, relationship building requires such KSAAs as patience, self-monitoring and self-regulation. Perspective taking requires KSAAs such as knowledge of types of cultural variation, an ethnorelative stance (DMIS Stage four—Acceptance of Difference), openness, and self-awareness. These interconnections will be acknowledged in the model.

Because perspective taking supports behavioral skills, it should take precedence in training activities and measurement. In other words, perspective taking is to intercultural sensitivity as suggested by Hammer, Bennett, and Wiseman (2003), as relationship and rapport building are to intercultural competence. Intercultural sensitivity is "the ability to discriminate and experience relevant cultural differences" whereas intercultural competence is "the ability to think and act in interculturally appropriate ways" (p. 422).

People who have attained the affective, perspective taking, and interpersonal skills that characterize this level of development can perform adequately in other cultures given specific activities for which they have been trained (such as standard patrols or cordon and search operations). However, they are not very flexible in their responses and may not function well in complex situations that require adapting their responses. Performance may falter if the person at this level is placed in stressful, task-oriented situations where uncertainty and instances of failure cannot be avoided, as they have little to fall back on to recover from failed attempts.

An example of a person at this level is found in an interview with a Platoon Sergeant who was on his third deployment in Iraq. He had actively avoided learning about the Iraqi culture or interacting with people there for two tours despite pre-deployment training. While not openly

hostile, he simply believed that learning about the culture and interacting with Iraqi people was irrelevant to his work in the Signals field, and he had no personal interest or motivation to move outside his own culture. He reported that once he was placed in a platoon leadership position and that platoon was required to move in convoys around a large area, and subsequently to deploy in groups of 3-4 people to positions around the AO, he had a realization that he had no understanding of where he was or who was around him. He felt that his ability to improve his understanding was crucial to the safety and success of his subordinates, a responsibility he took very seriously. He realized he did not have the competence to insure that safety and success. He did not know if Iraqis around him were friendly or a threat or how to tell who around him viewed him as an enemy. He had no idea how to engage a person on the street if he needed help during convoy operations if something went wrong. His realization led to his entry into and progress in the Foundation Level. This Soldier and his unit were far from the FOB and his usual sources of support. His subsequent efforts to understand who the people around him were and how to engage them for help or information propelled his cognitive and behavioral development in this level.

Task-Oriented Level

Third is the Task-Oriented Level. A person at this level is at the competent stage of development—the minimum for many military tasks found in counterinsurgency and humanitarian relief and assistance missions. The competent performer can think in terms of overarching goals, but focuses on tasks, has a personalized mental model or models of knowledge relevant to the domain that has been shaped by experience, can anticipate problems, is efficient and organized, is emotionally involved and takes ownership of successes and failures. The competent performer can deal with multiple demands in a situation, though may falter when called on to digress from plans (as noted in the Stage Model of Cognitive Development).

At this level, a competent performer can handle situations that are time-pressured and driven by externally-imposed goals. They have the resilience and flexibility necessary to cope with instances of failure, and they have the self-regulation and self-monitoring that are important for success. The competent performer also has the ability to manage uncertainty. At this level of competence an individual is at the ethnorelative DMIS stage five (Adaptation to Difference) as they become proficient at perspective taking and predicting situations based on an understanding of differences. People who are progressing through this level have the ability to shift frames of reference and their subsequent behavior. Refined attitudinal/affective abilities and skills become critical to performance. We believe that this level of competence is a realistic and desirable end goal for most Soldiers and in most business settings as well.

The defining feature of this level is the ability to concentrate on the task at hand and bring the cross-cultural competence to that task. We interviewed a well-trained, experienced infantry squad leader operating at this level. It is important for squad leaders to have this level of competence because as this participant put it, what a squad leader does, the rest of the squad will do. This interview participant viewed himself as competent (ranking himself 6 out of a possible 10), but not at the highest level of performance, even given his ability to perform under stress. He was competent, above average in his mind, because he was managing and coaching the execution of specific tasks that combined military and cross-cultural competence skills. (His

primary coaching involved visiting checkpoints manned by Iraqi citizens and U.S. Soldiers, helping them to interact successfully.) He also knew how to react to differences that were at least partly culturally motivated. For example, when coaching someone during a "right-seat ride," they encountered a situation where an Iraqi counterpart showed up 45 minutes late to a meeting. His attitude was to understand the differences in perception of time, to remind the counterpart of the importance of being on time for him, but did not allow the late start to overcome his mission focus. The newly arrived NCO who was there to observe "from the right seat" wanted to make the focus of the meeting about his own frustration at being kept waiting. The interviewee pointed out to him that there was a middle ground that could still get the task accomplished in terms of engaging the Iraqi counterpart and expressing his expectations for on time meetings, but focusing his interaction on the goal of the meeting. He ranked performance of those he worked with as superior to his performance when it involved the ability to shape operations and to manage a variety of relationships and situations without apparent conscious effort across multiple, ongoing encounters.

Mission-Centric Level

The fourth level is Mission-Centric Cross-Cultural Competence. This level encompasses the developmental stages of proficiency and expertise (see the Stage Model of Cognitive Development). At this level, cross-cultural competence is highly refined and mission-focused. That competence is called on as the performer switches from one setting to another, even one region or country to another, i.e., true cross-cultural competence, not just cultural competence. Performance supports a variety of encounters and tasks in a flexible manner that is fluid and effective, and the performer appears at ease (Conscious/Competent Model and Cultural Intelligence Model). The competence is used daily in deep and enduring relationships and activities that may take months to organize and execute as well as in new encounters and negotiations that are not dependent on long-term relationships. Relationship building is a finely tuned skill and the performer is at the top of the attitude and affective component and able to appreciate and leverage, as needed, the differences among cultures. A few rare MiTT Team Leaders, members of Civil Affairs, Special Forces, and at times, battalion and brigade commanders routinely call on this level of skill. Their actions shape the mission and set the conditions for success across the operation. They can adapt their cross-cultural competence to new settings across full spectrum operations and employ that competence in time-pressured, high stakes environments. This adds an extra dimension to the competency, and therefore to the measurement system. Rich contexts and challenging performance criteria are likely needed to assess that this level of competence is present. The ability of this performer to discern the nuances of a situation, project outcomes and predict behaviors, and quickly create courses of action are hallmarks of this level.

A poignant example of this level of expertise is found in a Special Forces Soldier who had over 20 years of cross-cultural experience in over 20 different countries. At times, this Soldier would receive no more than three weeks notice that he would be deployed to a country with which he had no prior knowledge or experience. As these deployments continued, the Soldier was able (through a combination of necessity and aptitude) to develop keen, generalized observational, interpretation, and interaction skills. He could be comfortable and effective from the start, regardless of his location or situation. For example, in the following situation, this

Soldier was able to leverage his abilities to save the life of his driver, and quite possibly, his entire team:

Background: A 12-person Special Forces team had recently been deployed to an unnamed Central African country. They were one of multiple units who were to operate independently as part of a broader mission. The overall objective was to promote pro-US sentiment by building positive relationships with all local clans in their particular region. Although there were other SF units in-country, this team was geographically separated from all other units, and was therefore very much on its own in this region. The regional minister of this particular area had dictated that no US Soldiers were allowed to drive their own cars. For this reason, whenever this team needed to travel anywhere by car, they had to hire indigenous drivers from local clans.

Situation: The SF team needed to travel to a local village over 40 km from their current location. They hired 3 drivers from a local clan near their current location. They had begun to build relationships with this clan, so they were somewhat familiar with these drivers. As they were en route to their destination, traveling through very rugged and overgrown terrain, one of the drivers accidentally hit and killed a young child who had been too close to the dangerous road. This child was from a different clan than that of the driver. The convoy immediately stopped, but within seconds, locals began to gather around the scene, surrounding the entire convoy. Nearly 300 locals from that clan quickly swarmed the scene, brandishing machetes and appearing extremely angry. Although their intent was not totally clear, they obviously were not pleased by the situation.

The SF Soldier in charge was not going to let his driver be killed, but he could tell that if he directed his team to take defensive stances that the mob would not react favorably (Anticipate/Predict/Perspective Taking), and that would be very detrimental to the overall mission of building positive relationships (Projecting/Big Picture Mentality). He deliberately calmed himself (Self-Regulation) and assessed the situation (Observation/Interpretation). Over the course of a few seconds, he determined from his prior experience in dealing with inter-clan dynamics that there was a way out and that the crowd was immediately concerned with justice and that they didn't want the driver to escape (Diagnose Nature of Resistance/Perspective-Taking). Through an interpreter, he ensured the crowd that they would not try to escape, and he expressed genuine remorse over the child's death (Emotional Empathy). He then deferentially asked to speak with the tribal leader (Self-Presentation/Persuasion). He also specifically requested that a neutral third party political tribal leader lead all negotiations. If not, he knew that one side or the other would likely not be pleased with the outcome and that hostilities would continue/deepen, thus impacting their broad mission (Anticipate/Big Picture Mentality). After 12 hours of negotiations involving meals, heated discussions, and offerings for compensation for the victim's family (Rapport-Building; Communication Skills; Negotiation/Persuasion; Patience), the Soldier was able, with the third party leader, to negotiate an agreement for compensation for the family and the sparing of the driver's life.

Descriptors of Performance

Combining developmental model stage descriptors with our data, we have developed initial descriptors of performance of KSAAs. Tables 2, 3, and 4 describe the developmental stages of an affective KSAA (willingness to engage), a cognitive KSAA (big picture mentality), and a behavioral KSAA (manipulate/persuade), respectively. These tables represent an attempt to incorporate previous research-based, developmental models into our model. For example, at the pre-competence stage of our model, an individual is very reluctant to engage with individuals of other cultures because they have an ethnocentric view (DMIS), have had little or no previous interaction (Stage Model of Skill Acquisition), are unaware of their unwillingness to engage (Conscious/Competent Model), are not interested in engaging (Model of Domain Learning), and do not view cultural interactions as different from non-cultural interactions (Cultural Intelligence Model). These tables are prototypes that demonstrate how ideas from existing models will be incorporated into our model development. They will also provide guidance to future data collections on indicators of competence that we may encounter. These KSAA stage descriptions will be a cornerstone of the final model in our next stage of research and provide much of the basis for subsequent measurement selection and development and differentiation among performers.

Table 2.

Stages of development for "willingness to engage"

Stages of developi	Pre-Competent	Foundation Foundation	Task-Oriented	Mission-Centric
General Characteristics	Pre-Competent Will not interact with foreign nationals unless under direct order, and then tends to react with resistance Actively avoids dining opportunities, social events, and foreign national operational/living areas Unwilling to learn or use (or resents being ordered to) even basic foreign language phrases/ words (if applicable)	Does not complain or show visible resistance when ordered to interact Will engage in limited voluntary interactions when it benefits mission Willing to learn and use basic foreign language phrases and words taught	Task-Oriented Takes interest in and initiates cultural interaction, knowing it is part of the job Takes personal interest in locals and the personal details of their lives and families when relationship building is required to get the job done Takes some initiative to learn foreign language beyond basic phrases and words taught	Mission-Centric Genuinely enjoys cultural interaction and participates in cultural activities and customs to better build relationships and rapport If it supports the mission, will actively engage locals even in the presence of personal distaste, dislike, discomfort or risk with focus on mission success Actively studies and attempts to learn and use the local language
Developmental Model of Intercultural Sensitivity applied	Ethnocentric attitude leads to negative attitude towards cultural interaction and thus little or no willingness to engage	Beginning of ethnorelative attitude features acceptance of cultural differences which leads to initial willingness to engage	Emerging empathetic perspective toward cultural differences of Adaptation stage leads to actual personal interest in other cultures and thus increased willingness to engage	Solidly in Adaptation stage of ethnorelativism allows for identification in depth with multiple points of view, which leads to very high interest and thus high willingness to engage
Stage Model of Skill Acquisition applied	Little or no experience with cultural interaction	Has enough experience with cultural interaction that performance is minimally acceptable	Can make comparisons based on extensive experience base of cultural interactions	Extensive experience with cultural interactions
	Tends to apply strict rules to engagement opportunities (e.g., "No way, unless ordered"), without considering any context	Beginning to develop own guidelines for interacting, but still very limited situational perception	Becomes less reactive and more thoughtful when interacting	Has intuitive understanding of how to interact

Conscious/ Competent Model applied	Is often completely unaware of the extreme nature of their unwillingness	May make reference to own unwillingness ("I guess I'm just that way"; "It's just a problem I have"), showing recognition of own incompetence	Aware of importance of willingness to engage and consciously makes the effort to improve	Engagement is unconsciously driven and seems automatic
Model of Domain Learning applied	No personal interest in cultural interaction	With early experience and exposure, personal interest in engagement begins to emerge	With more experience and exposure, personal interest in engagement is substantial	Shows very high, internalized interest in engaging
Thomas's Cultural Intelligence Model applied	Any cultural interactions are viewed/treated the same as non-cultural interactions	Heightened mindfulness in cultural interaction tends to overwhelm, resulting in confusions, requests for assistance	Actively engages; however, interactions require much conscious effort	High willingness to engage results in visible comfort within interactions

Table 3.

Stages of development for "big picture' mentality"

Foundation **Pre-Competent** Task-Oriented Mission-Centric Consistently willing General No sense of a bigger Begin to understand Understands picture; just there is a bigger connection between to put aside dislikes Characteristics individual tasks to picture but ask more having a big picture and discomforts to be completed experienced Soldiers mentality and achieve mission due for their broader mission success to ability to see assessment of a broader mission situation goals Ability to see big Acceptance stage of Beginning of Solidly in Developmental picture inhibited by ethnorelativism Adaptation stage of Adaptation stage of Model of narrow ethnocentric allows for openness ethnorelativism ethnorelativism; can Intercultural to other points of allows for deeper (and egocentric) identify in depth Sensitivity with multiple points point of view view, and thus an empathetic applied overall bigger perspective-taking of view, which picture potential and, thus, more allows for high level viewpoint accurate broader big picture mentality assessments of a situation

	Pre-Competent	Foundation	Task-Oriented	Mission-Centric
Stage Model of Skill Acquisition applied	No experience or practice in looking at broader picture in context	Has minimal experience applying big picture mentality to decision-making	Can make comparisons based on extensive experience base of big picture mentality	Extensive experience maintaining big picture mentality
	Strictly adheres to rules without question or thought, thus leaving no room for expanded viewpoint of bigger picture	Tendency to see aspects of a situation independently rather than interconnected and part of bigger picture	Being able to see the bigger picture, the learner is less reactive than earlier stages and can thoughtfully decide what actions need to be taken immediately and what can wait	Big picture mentality becomes part of intuitive process of understanding situations and effectively assessing what actions to take (happens naturally)
Conscious/ Competent Model applied	Is unaware of the existence and importance of big picture mentality as well as own lack of it	Aware of need for assessing broader situation and own lack of this ability	Must remind self to continually reassess big picture; not yet automatic	Person has practiced using big picture mentality sufficiently so that their use of it becomes unconscious and automatic
Model of Domain Learning applied	No personal interest in developing big picture mentality	With early experience and exposure, personal interest developing big picture mentality begins to emerge	With more experience and exposure, personal interest in cultivating broader situation assessment skills is substantial	Shows very high, internalized interest in mastering and maintaining big picture mentality
Thomas's Cultural Intelligence Model applied	Lack of recognition or respect for other cultures prevents bigger picture mentality	Increased curiosity and desire to learn more about other cultures lays foundation for developing big picture mentality	Beginning of a deeper understanding of cultural variation facilitates developing more accurate big picture mentality	Has extensive cultural knowledge and experience, which facilitates complex bigger picture mentality

Table 4.

Stages of development for "manipulate/persuade"

	Pre-Competent	Foundation	Task-Oriented	Mission-Centric
General Characteristics	Depends on anger or authority to persuade rather than skill	May attempt, with limited success, to persuade locals in low-threat cross-cultural situations Will continue to use initial persuasive strategies even if they have limited effectiveness	Understands how essential having manipulation/ persuasion skills is to achieving mission	Appears "smooth and seamless" when interacting with locals Able to rapidly change approaches when one persuasive tactic isn't working
Developmental Model of Intercultural Sensitivity applied	Ability to see others' points of view required for manipulation/ persuasion skills inhibited by narrow ethnocentric (and egocentric) viewpoint	Acceptance stage of ethnorelativism allows for openness to other points of view, which is necessary for the development of manipulation/persuasion skill	Beginning of Adaptation stage of ethnorelativism allows for deeper empathetic perspective-taking and, thus, more effective manipulation/ persuasion skills	Being solidly in Adaptation stage of ethnorelativism, can identify in depth with multiple points of view, which allows for high level manipulation/ persuasion skill development
Stage Model of Skill Acquisition applied	No real-world experience in cross-cultural persuasion Lack of situational judgment prevents any development of manipulation/ persuasion skills Strict adherence to rules and resulting inflexibility inhibits development of manipulation/ persuasion skills	Has enough experience with manipulation/persuasion that their performance is minimally acceptable Limited situational perception limits development of manipulation/persuasion skills Still sticks primarily to rules, but will begin to develop own guidelines for manipulation/persuasion skills	Substantial experience using manipulation/ persuasion skills Shift from being reactive to thoughtful and being better able to see the big picture assist the Soldier in developing effective manipulation/ persuasion skills Relies even less on rules, but still has tendency to depend on the plan to determine their behavior more than any situational elements that may	Extensive experience using manipulation/ Persuasion skills Intuitive understanding of situations leads to highly effective manipulation/ persuasion skills Smoothly adjusts plans, expectations, and judgments in application of manipulation/ persuasion skills as the dynamics change in situation

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	Pre-Competent	Foundation	Task-Oriented appear in applying manipulation/ persuasion skills	Mission-Centric
Conscious/ Competent Model applied	Is unaware of the existence and importance of manipulation/ persuasion skills as well as own lack of them	Aware of need for manipulation/ persuasion skills development and own lack of them	Able to accurately, deliberately and consistently use manipulation/ persuasion skills to assist in achieving mission without help though still requires concentration	Has practiced using manipulation/ persuasion skills sufficiently so that their use of them becomes unconscious and automatic
Model of Domain Learning applied	No personal interest in developing manipulation/persuasion skills	Begins to take interest in observing more experienced Soldiers during their interactions and ask thoughtful questions afterwards in order to facilitate own learning	With more experience and exposure, personal interest in developing manipulation/persuasion skills is substantial	Shows very high, internalized interest in mastering manipulation/ persuasion skills
Thomas's Cultural Intelligence Model applied	Follows one's own cultural rules and norms without awareness, which inhibits manipulation/ persuasion skills in context of cross-cultural situations	Recognition of other cultural norms and motivation to learn more about them assists in initial development of manipulation/ persuasion skills within cross-cultural context	Development of appropriate behavioral responses to different cultural situations, though somewhat awkward aid in effective use of manipulation/persuasion skills	High comfort and ease with repertoire of various cultural behaviors leads to advantage in manipulation/persuasion skills development in cross-cultural context

Conclusions

Soldiers that possess mission-centric cross-cultural competence have knowledge, skills, aptitudes and abilities that may be beyond what could realistically be expected of all Soldiers. Fortunately, they are also beyond what is likely needed in most cases. However, regardless of a Soldier's rank or assigned MOS, the pervasive cross-cultural nature of the COE implies that all Soldiers should have some degree of cross-cultural competence to support mission success.

Within this effort, a wide range of both observed and required competence was noted, and surprisingly, neither rank nor MOS were accurate predictors of either. After lengthy

deployments, several Infantry, MiTT, and even occasional Civil Affairs interview subjects returned with strong ethnocentric attitudes intact, and very few cross-cultural experiences that were not forced. Others returned with enhanced abilities to build rapport and relationships and a much greater appreciation of the connection between these abilities and mission success. The mindset of forcing first and persuading second is likely becoming less common, but it is not yet rare.

These perceptions are based primarily on interviews with MiTT and Civil Affairs Soldiers, with supplemental interviews with Special Forces, Medical, Military Police, Route Clearance, Infantry, Signals Soldiers and others. With the exceptions of the Civil Affairs and Special Forces Soldiers, the interviewees spoke primarily of experiences in Iraq or Afghanistan. These regions may accurately reflect the COE that a majority of Soldiers presently encounter, but they do not represent the wide range of future potential hotspots.

Further data collections and analyses across a wider range of deployment experience/location, rank and MOS are required to more fully understand the nature of *general* cross-cultural competence in the Army, including the types and amounts of required competencies, how the competencies develop and evolve, and the determinants of needed competence. This effort has resulted in a preliminary stage model of cross-cultural competence which will evolve with additional data collections. The model will ultimately serve as a foundation for identifying and developing a practical framework for measuring competence and for a computer-based tool to assess a Soldier's competence and provide meaningful feedback.

Future efforts also will also expand beyond the Army to include Air Force and other personnel. An outstanding research issue to be addressed concerns the applicability of a general model of cross-cultural competence across US military organizations. Are cross-cultural demands and related expertise equivalent across Services, or does each Service face its own unique challenges, and thus, associated competence?

Specific next steps in this particular research effort will focus on the development of self-report, situational judgment test, scenario-based, and other metrics. These metrics will serve to assess both individual competencies and overall mission-centric cross-cultural competence. The competence model will guide the selection of appropriate competencies to be measured and the identification of meaningful, measurable means to determine the stage of a Soldier's cross-cultural development.

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Appendix A: Developmental Model Summaries

Stage Model of Cognitive Skill Acquisition

Table A-1

Stage	Key Descriptors
Novice	 Has little or no experience in the domain or situations characteristic of it Limited and inflexible performance as a result of mostly context-free rules for comprehension Knowledge is treated outside of context, no relevance recognition, context analytically assessed, decision making is rational Exhibits strict adherence to rules or plans Situational perception is low Has no situational judgment
Advanced Beginner	 Has enough domain experience that performance is minimally acceptable Can begin to create their own guidelines Has not developed interconnectedness between concepts or the ability for flexible application. Knowledge treated within context, no relevance recognition, context analytically assessed, decision making is rational Has limited situational perception All attributes and aspects are treated individually and given the same importance
Competent	 Uses analytical, hierarchical approach for generating and managing longer-term goals Transition to this stage is highlighted by a shift from highly reactive behaviors to more thoughtful behaviors, where learner can see the bigger picture and decide what actions need to be taken right away and what can wait Has tendency to depend on the plan more than any situational elements that may appear Knowledge is treated within context, has relevance recognition, context analytically assessed, decision making is rational Sees action at least in part in relation to longer-term goals Exhibits mindful, deliberate planning Procedures are standardized and routinized
Proficient	 Sees the situation as a whole where the attributes are interconnected Can make comparisons based on extensive experience base Decisions regarding actions still require some detached analysis and deliberation Smoothly adjusts plans, expectations, and judgments as situation

Stage	Key Descriptors
Expert	changes Knowledge is treated within context, has relevance recognition, context holistically assessed, decision making is rational Sees situation as a whole rather than in terms of parts Assesses whatever has the greatest important in a situation Perceives changes from the normal pattern Uses maxims for assistance Situational aspects guide performance as situation evolves Quickly understands which aspects of the situation are most critical and appropriately disregards less important aspects Can fix a situation quickly and effectively Knowledge is treated within context, has relevance recognition, context holistically assessed, decision making is intuitive No longer depends on rules, guidelines, or maxims Has intuitive understanding of situations Intuitively recognizes appropriate decision or action Use analytic approach only in new situations or if problems occur

Table A-2

Stage	Key Descriptors
<u>Ethnocentric</u>	Believing that the world-view of one's own culture is at the center of all reality. Goes along with egocentrism – people believe their existence to be central to the reality all others perceive
1. Denial	 Belief that all people in the world share one's own world-view. Goes along with egocentrism - Only broad or no categories of cultural difference Appear friendly but potentially ethnically violent when pushed into cross-cultural contact A. <u>Isolation</u> – Isolation in own ethnic group fails to generate the opportunity or the motivation to create categories for cultural difference. B. <u>Separation</u> – Deliberate separation from different cultures protects world view from change by creating the conditions of isolation.
2. Defense	Position taken to counter the effect of cultural differences perceived as threatening to one's sense of reality, and thus to one's identity Recognition of cultural differences along with negative evaluation of most variations from own culture – the more the difference, the more negative the evaluation • Dualistic thinking (us/them) and negative stereotyping • View of native culture as peak of cultural evolutionary development • More elaborate categories for cultural difference, but original world view is protected by minimal integration of the new categories A. Denigration – Ethnocentric attitude can produce negative stereotyping as stage of development and rationale for other cultural groups inherent inferiority B. Superiority – Focus on the positive evaluation of one's own culture but does not necessarily degrade other cultures. Other cultures are merely regarded as lower in status and non-threatening. Own world view is seen as superior development. C. Reversal – Deprecation of one's own culture and a presumption of superiority of a different culture. Still dualistic thinking and ethnocentric but reversed. NOT always a stage of intercultural development
3. Minimization	 Cultural differences are seen to exist, but they are perceived as unimportant compared to cultural similarities. The assumed universal characteristics usually come from one's native culture. World view is protected by trying to incorporate difference into familiar superordinate categories. A. Physical Universalism – View that all humans have physical characteristics in common that determine behaviors which can basically be understood by any other human. Usually people at this stage will unconsciously use their own cultural world view to interpret others' behaviors. B. Transcendent Universalism – View that all humans are products of some single transcendent principle, such as a God, (even if other

Stage

Key Descriptors

person doesn't believe in the same God). Of all the ethnocentric stages, this one permits the greatest acknowledgement of cultural differences. But the universal principle seen to overlie cultural difference comes from one's own world view.

- *Both universalisms can regress quickly into the earlier defense stage.
- Movement to the next stage represents a major conceptual shift from reliance on absolute principles to an acknowledgement of nonabsolute relativity.

Ethnorelative

Cultures are understood relative to one another. One's own culture is no more central to reality than any other culture. There is not necessarily an ethical approval of all differences nor a lack of preference for one world view compared to another. Cultural difference is non-threatening and is more often found to be interesting and intriguing.

4. Acceptance

There is respect for and acknowledgement of cultural difference. The ability to interpret cultural cues within context begins to emerge.

- Cultural categories are differentiated and elaborated
- Attitude of curiosity; desire to acquire knowledge about cultures, including one's own

A. <u>Respect for Behavioral Difference</u> – All behavior is seen in cultural context. People begin to see foreign behavior as indicator of major cultural differences.

*If a person does not quickly move to the next stage, there is a possibility of regressing to transcendent universalism. Respect for value differences associated with behavior must be established or efforts at this stage may only elaborate details within an ethnocentric framework.

B. <u>Respect for Value Difference</u> – There is acceptance of the values that underlie cultural variation in behavior. Relativity of cultural values is essential to intercultural sensitivity. One understands one's own world view to be a relative cultural construct.

5. Adaptation

Appearance of abilities to use acceptance of cultural difference for relating and communicating with people of other cultures. Appropriate use of frame of reference shifting to understand and be understood.

- Category boundaries become more flexible and malleable
- Intentional perspective-taking and empathy

A. <u>Empathy</u> – Involves the willingness to suspend one's world view temporarily in order to experience another's. Yet empathy is limited in duration and extent.

B. <u>Pluralism</u> – Internally adopting more than one complete world view. Behavior is adjusted according to different cultural frames with little thought or effort. This stage can be reached without necessarily sequentially moving through the earlier stages.

- Greater cultural adaptability than basic empathy
- One can identify with more than one culture

6. Integration

Person is able to fully function outside the restrictions of any one culture.

Stage	Key Descriptors
	General difference becomes part of identity.
	 World view categories are seen as a creations maintained by one's
	self-reflective awareness
	A. Contextual Evaluation – Person has the ability to interpret and evaluate
	situations from different cultural perspectives. Person has the skill of
	changing cultural context and detached self-awareness, which allows for
	choice. This is the last stage of development for most people.
	B. Constructive Marginality – Person is outside all frames of cultural
	reference. It can be a constructive stage although many people go through
	much discomfort and dysfunction. This stage has greatest potential for unbiased cultural perspective taking.

Table A-3

Conscious/Competent Develo	opmental Model
Stage	Key Descriptors
1. Unconscious/Incompetent	 Is unaware of the competency's existence or its importance Is unaware of their lack of the competency Might deny the importance or usefulness of the new competency Must first become aware of their lack of the competency before they can begin to learn it Goal of the learner and trainer is to move the learner into the next stage of "conscious competence" by being able to perform the competency and understand its relevance
2. Conscious/Incompetent	 Becomes aware of the competency and its importance Is aware of their lack of the competence Realizes how acquiring the competency will benefit their performance Ideally has a way to measure the development of their skill Ideally commits to learning the competency and moving to the next stage of "conscious competence"
3. Conscious/Competent	 Moves to this stage when can perform the competence consistently and deliberately Needs to concentrate to perform the competency

4. Unconscious/Competent

 Has practiced the competence sufficiently so that performance becomes unconscious and automatic

• Does not need help to perform the competency

• Is likely to be unable to teach the new competence very

Continues to *practice* the new competency, which is the means to getting to the next stage of "unconscious

• Cannot yet perform automatically

well to another person

competence"

- Can perform the activity while doing something else
- Is better able to teach the competency although after a time the competence may become too unconscious for the person to be able to explain how they do it

Table A-4

Alexander's Model of Domain Learning

Stage	Key Descriptors
Acclimation	 Is acclimating to an extensive new domain Has restricted and fractional knowledge Has limited ability to differentiate between correct/relevant and incorrect/irrelevant information regarding the domain Uses surface-level methods Has limited personal interest and usually depend on situational interest
Competence	 Knowledge base expands and improves Establishes a comprehensive foundational body of domain knowledge Uses a combination of surface-level and deep-processing methods Has more personal interest in the domain and depend less on situational interest
Proficiency	 Adds new knowledge to the domain Is extensively aware of the issues and complexities of the domain Utilizes deep-processing methods Personal interest is very high

Table A-5

Thomas'	Cultural Intelligence Model
Stage	Key Descriptors

Stage	Key Descriptors
1. Reactivity	Is reactive to external stimuli
	 Follows one's own cultural rules and norms without awareness Typically has very little exposure to, or interest in, other cultures Either does not recognize that there are cultural differences or considers them unimportant Might say things like, "I don't see any differences" and "I treat
	everyone the same way."
2. Recognition	 Recognizes other cultural norms and is motivated to learn more about them Experience and mindfulness produces a new awareness of the our modifications and appears of the cultural model.
	 multicultural world Heightened mindfulness can lead to an overwhelming amount of new information
	 Exhibits increased curiosity and desire to learn more May have difficulty managing the complexity of a different culture Searches for simple guidelines to direct behavior.
3. Accommodation	 Accommodates other cultural standards and rules in one's own mind Has no more reliance on absolutes Is developing a deeper understanding of cultural variation Norms and rules of various cultures begin to seem understandable in their context Develops appropriate behavioral responses to different cultural situations Attends to only somewhat obvious cues Adaptive behavior takes much effort and is usually awkward Knows what to do and say in different cultural situations Adaptive behavior does not yet feel natural
4. Assimilation	 Assimilates diverse cultural norms into alternative behaviors. Adjusts to different cultural situations with little effort. Can build a collection of behaviors from which they can choose according to the specific cultural situation. Experiments with new behavior. Operates in a number of different cultures almost without effort and as easily as if they were in their own culture.
5. Proactivity	 Is viewed by members of other cultures as culturally knowledgeable and is comfortable interacting with them. Feels comfortable almost anywhere. Is proactive in cultural behavior based on recognizing changing cues that others do not notice Has the ability, through ongoing sampling of internal states and external cues, to perceive changes in cultural context, at times even

Stage	Key Descriptors
	before people of the other culture
	 Is extremely attuned to the nuances of intercultural interactions; adapt their behavior to anticipate these changes and facilitate improved intercultural interactions among others
	 Appears to intuitively know what behaviors are needed and how to execute them appropriately

Appendix B: Example Competence Incidents

1. Where Are My Trainers?

Background: A Team Operations Officer/Maneuver Trainer, also a Captain, had been assigned to a Military Transition Team for the past several months. His current mission was to train his Iraqi Army battalion counterparts to serve as trainers themselves. The overall intent was to develop the Iraqi Army battalion to a point where they could effectively develop local citizen's militia units so that these units could defend themselves. These units were referred to as The Concerned Citizens Group (CCG). The CCGs would show up at predetermined times to receive training, but you never knew who would arrive. Further, you could usually assume that, within each group that arrived for training, there would be a few individuals serving as spies for Al-Qaeda.

Situation: On the evening before a major training day where the Iraqi Soldiers were to train the CCG, the Captain went over the details of the next day's training plan with all who were involved. Everyone, including the Iraqi counterparts, appeared to be in full agreement with the plan. The next morning the Captain arrived at the training location at the designated pre-training time and discovered that every single Iraqi Soldier who was supposed to conduct the training that day was gone. Inside, the Captain was frustrated, but he maintained his outward composure (Self-Presentation), realizing that it would do no good to blow up in front of his Soldiers at this point and quickly calmed himself down (Self-Regulation). The Captain immediately proceeded to the Iraqi housing compound and discovered that the entire group that was scheduled to perform the morning's training with the CCG had gone on leave. He quickly realized that if the CCG civilians showed up and there was no training, the entire joint Iraqi/US presence would appear inefficient and weak, thus reducing the civilians' confidence in the presence (Prediction/Big Picture). He located the replacement Iraqi counterpart, and quickly explained to him in terms that he knew would be convincing (Perspective-Taking) that if the CCG sees the disorganization of the Iraqi Army, it will make them look weak and leave them vulnerable to Al-Qaeda infiltrating the CCG. He explained how his counterpart would also look bad, which was especially motivating (Persuasion/Manipulation). The captain says a novice would probably just have cancelled training for the day. However, in understanding the importance of the US team's mission to train the Iraqi Army, the Captain is dedicated to making this work (Resilience/Dedication). The Captain also recognized the importance of not doing everything for the Iraqis; they needed to learn for themselves (Mission Focus/Big Picture). He anticipates resistance from the Iragis who will serve as trainers since they weren't the ones who originally were assigned with this task (Anticipation), and accounts for this in his ongoing discussions with the new Iraqi Soldiers. He successfully persuaded his Iraqi counterpart to work together with him and rapidly pull together what personnel he could to conduct the training (Flexibility). The Iragis work much more quickly and efficiently than they had on previous occasions and were able to meet the challenge. They went on to have a successful day of training the CCG.

2. School for Everyone

Background: A Civil Affairs Soldier in Afghanistan was working with a local government, supporting its desire to build a new school. After several meetings and an area study, an agreement was reached on where and how to have the school constructed.

Situation: Without warning, the Afghani officials suddenly stated that the school was to be boysonly. The CA Soldier was shocked and very averse to this idea, but he knew he had to control his response and appeared neutral on the issue (Self-Presentation; Self-Monitoring). He knew from his area study and previous experience that allowing girls in the school would best promote long-term stability. He subtly tried to persuade the Afghanis to include girls (Indirect Manipulation; Flexibility). He made excuses for delaying the project even though he had funding approval (Patience; Withhold on Closure) and blamed higher-up approval for the nonexistent funding delays, saying "they are really upset about your boys-only policy" (Manipulation). He continued to withhold the knowledge that the funding was already approved recognizing that if the Afghanis knew, all power would be lost (Perspective-Taking; Manipulation; Mission Focus). He suggested the idea of allowing girls in the school, pointing out that if no women were allowed, there would be staffing shortages, and by not educating the girls now, there would continue to be a shortage of educated teachers in the future (Manipulation/Persuasion). The Afghanis finally conceded, so the Soldier waited a few days and then told them that funding had now been approved. He still anticipated future disapproval of the mixed-gender school within the community (Anticipation; Perspective-Taking), however. To proactively counter this envisioned resistance, he arranged to have local, well-respected women involved in the groundbreaking ceremony for the school (Manipulation; Perspective-Taking). The school went on to have a mixed-gender enrollment and was well-received in the community.

3. The Goat Gift

Background: A Civil Affairs team was in the midst of a humanitarian mission in a remote region of Chad. They had just completed a mission task of establishing a new school in a small village. Positive relationships had been formed and, with the exception of a few minor hassles along the way, the mission was a complete success.

Situation: After the school was completed, the Civil Affairs team was wrapping up some loose ends in the village, before preparing for another task in a different region. The villagers they had built the school for were very grateful and wanted to show their appreciation. They decided to give the CA team leader a live goat as a gift. The leader quickly expressed gratitude and then politely and gently declined. He did not want to keep a goat for the several days they were going to remain in the village and then have to take the goat with them when they left. However, he immediately noticed that the villagers were quite adamant about the goat. The Soldier was quite aware that this goat represented a significant gift to these poor villagers and that it was a very strong sign of gratitude (Awareness of Cultural Differences). The CA leader also knew how important it was for the villagers' sense of pride to be able to make an offering in thanks for the CA team's service and that it would be very insulting to refuse the gift (Perspective-Taking). He knew that continued refusal would likely damage not only the positive relationships his team had built with this village (Self-Presentation; Perspective-Taking), but also the villagers' impressions

of the US military and the overall reputation they were working so hard to establish (Big Picture Mentality; Self-Presentation). The Soldier further realized that they couldn't simply accept the goat and then leave and simply drop it a few miles out or give it away in the next village because all the area villages have informal communication chains and a found goat would be newsworthy; word would inevitably get back to the village elder (Anticipation/Prediction). Therefore, the Soldier graciously accepted "the \$&@ goat," and kept it with him or his team members for the several days leading up to their departure so that the villagers could see them appearing happy to have the animal (Self Presentation). They then had to bring this live animal with them to a safe distance (nearly 250km) before finally giving it away (Dedication).

4. Searching the Mosque

Background: A MiTT in Iraq was training an Iraqi Army battalion to defend a region from insurgents. During an attack on Easter Sunday, the MiTT Soldiers and Iraqi Army successfully eliminated 30-40 attackers over the day.

Situation: After the main attack, MiTT team leader received reports that insurgents were firing on civilians from within a mosque in the village. Because the MiTT leader had made it a top priority to spend time interacting with the Iraqi Army leaders as well as with local civilians to establish rapport and relationships (Rapport/Relationship-Building) US forces got permission to search the mosque (this was a major accomplishment, given the sanctity of the building to the people). The US forces now could enter the mosque to eliminate the threat, but the MiTT leader had the final call. He envisioned possible reactions from villagers and the Iraqi Army. What if the Mosque was damaged? What if artifacts were destroyed? What would the locals think of the Iraqi Army stood by while US forces entered the mosque? What would the Iraqi Army themselves think for that matter? (Anticipating/Predicting; Perspective-Taking; Frame Shifting; Big Picture Mentality). The leader decided to have the Iraqi Army Soldiers search the mosque themselves. He saw the added benefit of boosting their self-confidence and overall skills, which was what the MiTT was there for (Big Picture Mentality). To ensure that the Iraqi unit in training would be willing to perform the task, the MiTT leader reminded the Iraqi Soldiers about all the IEDs that were killing their people, their families, and that this was an opportunity to protect them and decrease the threat (Persuasion; Perspective-Taking). This sufficiently persuaded the Iraqi Soldiers, and they found the insurgents and a significant amount of IED components as well. The incident ended up being a great source of pride for the Iraqi Soldiers.